

Impact of Aadhaar on Welfare Programmes

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India's ambitious biometric identity documents project, Aadhaar, was portrayed as one that would enhance India's welfare efforts by promoting inclusion and reducing corruption. From being a voluntary ID, it has become de facto compulsory for most welfare programmes. Despite early warnings of its limited role in achieving its stated objectives, successive governments have ramped up its use. Using a variety of sources, a review of the impact of Aadhaar on welfare programmes is presented. It is found that far from being inclusive and reducing corruption, Aadhaar is becoming a tool of exclusion. The government's estimates of savings also do not stand up to scrutiny, and whatever is termed as savings is often the result of a denial of legal entitlements. In its current form, the Aadhaar project undermines the right to life.

A little learning is a dangerous thing;
drink deep, or taste not the Pierian spring;
there shallow draughts intoxicate the brain,
and drinking largely sobers us again.

—Alexander Pope (1709)

Alexander Pope aptly describes the origins and evolution of the unique identity (UID) project (widely known as "Aadhaar") that was initiated to provide each resident of India a unique number linked to his or her biometrics. Among other things, it was meant to lead to greater inclusion into welfare programmes, reduce corruption in them and remove intermediaries from the delivery mechanism.

Based on the evidence of the source of corruption in programmes such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), public distribution system (PDS), social security pensions (SSP), etc, and the proposed use of UID in them, Khera (2011) concludes that, *a priori*, there is a very limited role for Aadhaar in improving their implementation. The government's stated purpose of using Aadhaar in welfare programmes was unlikely to be fulfilled.

The government, however, continued to push for Aadhaar-integration in these programmes. This paper looks at the impact of this Aadhaar-integration primarily in MGNREGA, PDS and SSP. The cases of the liquified petroleum gas (LPG) subsidy and the proposed application of Aadhaar in the mid-day meal (MDM) scheme are also briefly discussed.

This paper relies on a variety of evidence: quantitative data from primary field studies, secondary data from government portals, figures obtained through queries made under the Right to Information (RTI) Act, and responses to questions in Parliament. Besides this, news reports are used to highlight emerging issues for which official data are currently not available.

What emerges is as follows: one, the extent of corruption in these programmes varies, but even where it is high, there has been a decline predating Aadhaar-integration (for example, MGNREGA and PDS). Two, Aadhaar-integration cannot solve the major forms of corruption that continue (primarily "quantity fraud"). Three, far from improving the implementation of these programmes, there are signs of Aadhaar-integration causing serious damage. Four, based on its own data, the government's savings estimates due to Aadhaar-integration are highly questionable.

In a nutshell, the gains are limited and tentative, whereas the damage is certain and possibly substantial. Given this, the government's decision to make Aadhaar mandatory for a range of welfare programmes is a cause for alarm. The "right to privacy" challenge to the Aadhaar project has received a lot

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of attention, but the “right to life” challenge to it has thus far not been adequately highlighted. This paper attempts to fill that gap.

Background

Lack of an identity document:¹ The proponents of the UID project claimed that a large number of Indians were denied welfare benefits because people did not have any identity documents (IDs). This assertion, which was not really supported with evidence, provided the initial justification for the project.² If, as the government claimed, the coverage of existing forms of ID was incomplete, then those should have been expanded to ensure wider coverage. This was rejected on the grounds that existing databases were seriously flawed.

The Unique Identification Authority of India (UIDAI) was set up to organise enrolment and generation of Aadhaar numbers. Apart from the National Population Register (NPR), there are two ways of enrolling for an Aadhaar number from the UIDAI directly. One, using a proof of ID and a proof of address from a list (including passports, ration cards, voter IDs, etc) drawn up by the UIDAI.³ Two, using the “introducer” system. This was set up keeping in mind those people who were lacking in pre-existing IDs (Khera 2015).

According to a response to a right to information (RTI) query in 2015, only 0.03% of Aadhaar numbers were issued through the introducer system. The rest were issued to those who submitted two IDs or through the NPR, raising questions about the basic premise of the Aadhaar project.

Note also that the UIDAI used those very flawed IDs to enrol for Aadhaar that it had rejected as error-ridden. This circularity has gone largely unnoticed. It has serious implications for the reliability of the Aadhaar database.⁴ Being independent of biometric data (fingerprint, photograph and iris scans), the accuracy of demographic data (for example, name, date of birth, etc) in the Aadhaar database is especially important now as it is becoming the basis for claiming benefits. There has been no independent audit of the database, so we do not know to what extent there are errors, but media reports routinely highlight them.

The promoters of UID also succeeded in creating the impression that Aadhaar would guarantee access to benefits, end the *mai-baap sarkar* culture and enable people to assert their rights vis-à-vis state structures. Here again, the UIDAI was misinformed. Exclusion is largely the result of a weak “targeting” mechanism (identification of the poor) and the imposition of stringent caps on coverage (arising from budgetary constraints).⁵ For instance, in the PDS, statewise central commitment was fixed at the poverty rate estimated using National Sample Survey Office (NSSO) data from 1993–94 until the passage of the National Food Security Act (NFS) in 2013. Caps were applied in several schemes (for example, for pensions, housing, etc). The possession of an additional ID cannot solve the problem of exclusion, unless these caps are relaxed or identification methods improve. Instead, as discussed subsequently, Aadhaar is slowly becoming a tool of exclusion, the last hurdle after all the prior eligibility hurdles have been crossed. For some, enrolling for Aadhaar has not been easy (Caribou Digital 2017).

Corruption:⁶ Another justification for the Aadhaar project was its purported role in reducing corruption in welfare programmes such as MGNREGA, PDS and pensions. Fraud in these programmes can be broadly categorised as “eligibility fraud,” “identity fraud,” and “quantity fraud.”

“Eligibility fraud” refers to inclusion of persons who do not meet official eligibility criteria, for example, by presenting fudged supporting documents. “Quantity fraud” takes the form of eligible persons receiving less than their entitlements, for instance under-selling in the PDS (people are forced to sign off on more than what they actually get); in MDM, it could refer to dilution of prescribed nutrition norms (for instance, not following the menu at all, or giving watery dal, etc).

“Identity fraud” refers to cases where one person’s benefits are claimed fraudulently by another. In the PDS, an official may defraud the system by getting a ration card in the name of a non-existent person or dead person (“ghosts”), or getting two cards when they are entitled to only one (“duplicates”). In the MDM scheme, identity fraud can take the form of inflated attendance (where costs are booked for more children than are actually being served meals).

In programmes such as MGNREGA and SSP, which provide support in cash rather than kind, one big protection against identity fraud comes from using the banking system to transfer funds. This eliminates, by and large, the possibility of identity fraud so long as banking norms are observed.⁷

Biometric technology, to the extent that it is reliable can help eliminate identity fraud, but has a very limited role, if any, in reducing quantity fraud or eligibility fraud. There is limited evidence on the magnitude of each type of fraud, but available evidence suggests that quantity fraud is the bigger problem (Khera 2011, 2015). Therefore, contrary to the government’s understanding, Aadhaar can only play a marginal role in reducing corruption.

Aadhaar in Welfare

The following sections examine the evidence on Aadhaar-integration in four important welfare programmes: the PDS, the MGNREGA, SSP and MDM schemes. For each scheme, three broad themes are examined: recent evidence on corruption, the government’s claims about Aadhaar’s contribution to improved implementation of these schemes, and the emerging evidence on disruption due to Aadhaar-integration.

Aadhaar-integration is planned in two ways. One, “Aadhaar-seeding” refers to adding a data field for the Aadhaar number to the software (Management Information System or MIS) that is used to administer these programmes. This is supposed to be a simple one-off activity, yet it is not quite as simple as it sounds. For each scheme, each entitled person needs to be informed of what is needed, a range of supporting documents may be required, the number may not be correctly entered, etc. Further, in many cases, re-enrolment of biometrics has been necessary as fingerprints or iris scans become outdated. Aadhaar-seeding can help with eliminating identity fraud by weeding out “bogus” beneficiaries (for example, dead, non-existent persons, etc). Once 100% Aadhaar-seeding is achieved, beneficiaries in the MIS without Aadhaar numbers are deemed to be bogus and are deleted.

Two, Aadhaar-based biometric authentication (ABBA) refers to the practice of installing a Point of Sale (POS) machine equipped with a fingerprint reader and authenticating a person each time she accesses her entitlements. For instance, at the time of purchase of PDS grain each month, any one person listed on the ration card needs to authenticate themselves. Similarly, for pensions, elderly persons must go to the point of delivery (for example, post office or gram panchayat office) to authenticate themselves. ABBA serves the role of signatures (in the pre-Aadhaar days). ABBA on POS machines is currently a monthly activity, so each of its associated technologies (correct Aadhaar-seeding, mobile connectivity, electricity, functional POS machines and UIDAI servers and fingerprint recognition) needs to work for a person to get their entitlement.

Public Distribution System

The PDS provides subsidised ration (mainly wheat and rice) to entitled households through a network of PDS outlets. Corruption has been a serious problem in the form of identity fraud (for example, duplicates, ghosts, non-existent, etc) and quantity fraud (that is, under-selling). Eligibility fraud and exclusion errors have also plagued the PDS: according to one estimate, half of the poorest did not have a below poverty line (BPL) ration card in the early 2000s (Drèze and Khera 2010). There are other problems in the PDS too (for example, overcharging, quality of grain) that are not as well documented.

The latest year for which estimates of corruption are available is 2011–12 (Drèze and Khera 2015a). These estimates are made by matching administrative data on offtake by states with PDS purchase by households reported in nationally representative surveys such as the NSSO and India Human Development Survey (IHDS). By 2011–12, a reduction in leakages was well established in a handful of states such as Chhattisgarh, Odisha, etc. For instance, in Chhattisgarh, leakages declined from 50% in 2004–05 to around 10% in 2011–12.⁸ In the same period, according to NSSO data, all-India leakages declined from 54% to 42%; and according to IHDS data, from 49% to 32%.

With the passage of the NFSA in 2013, the coverage of the PDS was to be expanded to 75% of the population in rural areas and 50% in urban areas. The act also mandated the drawing up of a fresh list of entitled households. Two categories of households were created: “priority,” with a per capita entitlement of 5 kg per person per month and “Antyodaya,” 35 kg per household per month (Puri 2017).

The initial evidence from field surveys so far suggests that the rollout of the NFSA has led to a further reduction in leakages (Puri 2017). In states like Madhya Pradesh and West Bengal, initial evidence suggests that the gains from the rollout of the NFSA have been dramatic: entitled households now get more than 95% of their entitlements in these states (Drèze and Khera 2015b; Drèze et al 2016).

Close on the heels of the implementation of the NFSA, orders for Aadhaar-integration in the PDS were issued on 7 November (GoI 2014). Different states are at different stages of accomplishing this.⁹ A handful of states (Andhra Pradesh, Jharkhand, Rajasthan and Telangana), at least, have moved to a more or

less 100% Aadhaar-integrated PDS, including the use of POS machines with ABBA each month. The effects of Aadhaar-integration are perhaps best documented in the PDS.

Identity fraud: The extent of identity fraud before the rollout of the NFSA was not documented. The National Institute of Public Finance and Policy’s (NIPFP) cost–benefit analysis also cites the lack of data on identity fraud as the reason for resorting to ad hoc assumptions on this (Khera 2013a, 2013b). The government relied, at best, on anecdotal evidence of “ghosts” and “duplicates” to make its case for Aadhaar-integration.

After the rollout of the NFSA, the evidence suggests that there is hardly any identity fraud in those states that used Socio-economic Caste Census (SECC) data. In states like Bihar, Jharkhand and West Bengal, the preparation of new ration card lists was on the basis of the SECC (for example, see Drèze et al 2015; Drèze and Maji 2016; Puri 2017). The SECC itself, if anything, suffered from exclusion errors (for example, some hamlets were not covered or individuals in households did not get enumerated). In other states, which did not use SECC we do not know the extent of identity fraud.

As mentioned earlier, 100% Aadhaar-seeding can help detect identity fraud by linking each person’s Aadhaar numbers to their name in the PDS database (and those names or cards that are without an Aadhaar number can be deleted.)

The government claimed that ₹14,000 crore has been saved in the PDS due to “deletion of 2.33 crore ration cards up to 2016–17 and better targeting of beneficiaries” (GoI 2017c).¹⁰

Questions answered in Parliament suggest that these claims are bogus. Data presented in Parliament is the most credible source of information on deleted cards. It is clear that what the government is referring to is “ineligible cards,” that is, “eligibility fraud” (GoI 2016c). The answer is worth quoting at length:

The exercise of deletion of bogus/ineligible cards and inclusion of eligible families is a continuous process and State/UT Governments are to periodically carry out the same. As per the information received from State/UT Governments, as a result of the continuous exercise of reviewing the list of Ration Cards, a total of 2.33 crores ration cards have been deleted during the period 2013 to 2016 [upto 16–11–2016] (emphasis added).

This suggests that *all* the deletions are due to ineligibility. Digitisation or Aadhaar-integration cannot eliminate eligibility fraud. Eligibility is determined by the criteria notified by states (for instance, living in a mud house, or caste status, etc). Aadhaar does not provide this information.

The data refers to the period during which the NFSA was rolled out, which further strengthens the possibility that the deletions were due to new ration card lists being drawn up. To illustrate, let us look at the data for Karnataka. In 2014, the state deleted 40% of all ration cards, and in 2015, 7% of ration cards were deleted (GoI 2016a). The total number of cards in the state, however, declined from 1.31 crore to 1.29 crore (that is, only 2%). Thus, though a large number of cards were deleted in 2014, almost an equal number were also added. This is true for the all-India numbers too. The overall reduction of cards in circulation is only 6.6%. By focusing on deleted cards, the government has sought to distract attention from the real issue.

There is another problem with these numbers: in all states except West Bengal, ration cards are issued for each household. In West Bengal, each individual in each household gets a ration card. Therefore, the reporting unit is not the same. However, in government records, this difference in unit is not taken into account. This has the effect of inflating the number of cards deleted. Finally, the large number of the deletions predate Aadhaar-integration orders (of November 2014). By April 2016, only half of all ration cards had been Aadhaar-linked, raising further questions about Aadhaar's role in detecting these "bogus/ineligible" cards.

Quantity fraud: Quantity fraud in the PDS refers primarily to under-selling. In the manual system, cardholders were told to sign off ("authenticate") on full purchases even though they may be given less (for instance, receiving 32 kg after signing for 35 kg). With the introduction of the POS machine and ABBA, the register has been replaced with the POS, but underselling continues more or less as before. Several field studies in Delhi (Shagun and Priya 2016; Nayak and Nehra 2017), Gujarat (Yadav 2016d), Rajasthan (Yadav 2016a, 2016b; Khera 2017a) and Jharkhand (Drèze 2017a; Drèze et al 2017) corroborate this.

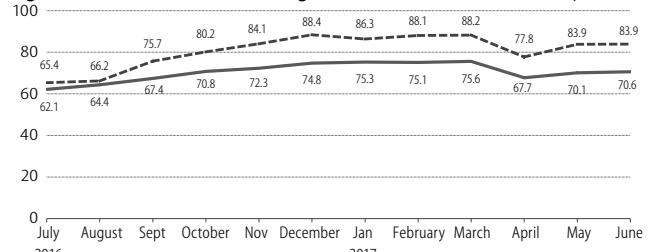
One form of quantity fraud that ABBA may help with is the "skipping" of months. In some states (for example, Bihar and Jharkhand), apart from taking a cut each month, dealers also siphon off entire months' worth of rations. Similarly, in many states, dealers could divert "leftover" rations to the open market.¹¹ The introduction of ABBA can put an end to skipping and leftovers.¹² Skipping used to be rampant in several north Indian states, but there is evidence of a decline in recent years pre-Aadhaar (Drèze et al 2015).

Exclusion, denial, higher transaction costs: In a handful of states, ABBA is mandatory each month at a POS machine installed at the ration shop. As discussed earlier, ABBA has no role in stopping identity fraud (that only requires 100% Aadhaar seeding), and can do little to stop quantity fraud.

ABBA is contributing to exclusion from the PDS in a number of ways. One, families or individuals without Aadhaar numbers cannot register, so they cannot get the rations to which they are legally entitled. In Delhi, for instance, without Aadhaar names are not included on the NFSA card (Shagun and Priya 2016; Nayak and Nehra 2017). The central government directive requires that as long as any one member's Aadhaar number is linked, everyone listed on the ration card will get grain. While Jharkhand follows this rule, in Delhi and Andhra Pradesh, the quantity of ration provided is according to the number of Aadhaar numbers that are linked to the ration card (Somanchi et al 2017; Bhattacharjee 2017; Khera 2017a; Hossain 2017). Missing Aadhaar numbers mean ration is cut.

Two, outright exclusion can also be because no member of the family is "pos-able" (a pos-able person is one who is Aadhaar-linked and whose fingerprints are recognised by the POS machine). Biometric failures have been recorded in states using Aadhaar (*Hindustan Times* 2015; Bhatnagar 2016; Yadav 2016c, 2016e) as well as non-Aadhaar biometrics (for example, in Gujarat).

Figure 1: Wheat Transactions through ABBA (% of successful cards and quantities)



Source: State NFSA portal for ABBA sales (http://food.raj.nic.in/DistrictWise_Allotment_Distribution_Details.aspx), state supply (http://food.raj.nic.in/District_Wise_Allotment.aspx), number of successful cards (<http://food.raj.nic.in/DistrictWisePOSDetails.aspx>) and total NFSA cards (http://food.raj.nic.in/NFSASummaryDistrictWise_eMitra_NFSAYES.aspx).

Apart from these field studies, questions in Parliament corroborate some of these issues: for instance, the government stated that in Rajasthan, in February 2017, "78% of NFSA beneficiaries have been provided wheat through POS transactions" and it is claimed there that there were alternative arrangements (like one-time password or OTP) for the others (GOI 2017b).¹³ The government admitted that "the disruption in the Aadhaar authentication services in Rajasthan ... were on account of 'inadequate server capacity of the Rajasthan Government,' 'insufficient lease line capacity,' 'poor mobile signal at POS devices,' 'incorrect seeding of Aadhaar numbers in PDS database,' etc (GOI 2016b).

Official data from Rajasthan shows that, from July 2016 to June 2017, between 25% and 30% of one crore cardholders in the state (accounting for 12%–35% of allotted grain) do not buy grain from PDS outlets (Figure 1). Khalid (forthcoming) reports similar results using the Jharkhand food data portal. Earlier studies show that demand for PDS grain is high, and that eligible households would not purchase PDS grain only under very compelling circumstances (like when the entire family being out in a particular month). The state food portal does not show whether those who did not buy in any particular month, tried at all later on.¹⁴

Apart from outright exclusion, ABBA is leading to sporadic denial of ration and higher transaction costs. For example, only those members whose Aadhaar number is seeded in the PDS database can withdraw rations (Maji 2017). Technology failures (like, connectivity, failure of fingerprint authentication, server issues, etc) also contribute to these problems (Drèze 2016a).

A recent survey of 900 households in rural Jharkhand corroborates the findings that when ABBA works for entitled households, it comes with higher transaction costs and little protection against quantity fraud. Those who are excluded by ABBA tend to be the most vulnerable: the elderly who cannot walk, widow with young children, etc (Drèze et al 2017).

National Rural Employment Guarantee Act

The MGNREGA was passed in 2005, and guarantees 100 days of work (per household) to any adult willing to work. As per the act, at least 60% of total expenditure is on wages and the rest on material. Corruption is observed in both wage and material expenditure.

In 2008, the central government made it mandatory for wages to be paid into bank and post office accounts. The move

from cash payments to bank payments led to a sharp reduction in corruption. NSSO data suggests that between 2007–08 and 2011–12 wage corruption declined from 44%–58% to 22%–32% (Imbert and Papp 2015). Using IHDS data for 2011–12, Drèze (2014) finds that the decline is even more impressive. Less than 5% of MGNREGA work in government records was not confirmed by respondents. As with the PDS, the decline in wage corruption predates Aadhaar-integration.

This suggests that contrary to government rhetoric, there are other methods of reducing corruption in these programmes. In MGNREGA, the dramatic reduction in wage corruption is because of separation of the implementing agency (like the panchayat) and the payment agency (banks and post offices) (Adhikari and Bhatia 2010; Drèze and Khera 2008). Even with payments into accounts, wage corruption can continue (Adhikari and Bhatia 2010). It can take three forms: extortion (forcibly taking wages once labourers have withdrawn it from their account), collusion (workers allow corrupt functionaries “use” their job card and account to inflate work on muster rolls and sharing embezzled funds with them) and deception (operating the workers’ account without their knowledge).

Extortion and collusion can be characterised as “quantity fraud,” so ABBA cannot help. Deception is a form of identity fraud where ABBA can help. Two caveats: one, we do not know the size of deception in total wage corruption. Two, once wage corruption through deception is blocked, those who were using it may resort to extortion and collusion.

Savings: In the MGNREGA ₹7,633 crore is assessed to have been saved up to 31 December 2016 due to Aadhaar-integration (GOI 2017c).

In a news report the secretary, rural development ministry, was cited saying that “with the use of IT [information technology], Aadhaar, leakages have come down” (Chitravanshi 2016). An RTI query enquired about the methodology used to “arrive at the assessment (qualitative and quantitative) on decrease in leakages.” The response stated that “Mahatma Gandhi NREGA has been covered under Direct Benefit Transfer (DBT) and savings are in terms of increasing the efficiency and reducing the delay in payments etc” (Sabhikhi 2017). In other words, there was no *estimate* of savings, as initially reported.

Chatterji (2017) reported that in 2016–17, 94 lakh “fake” job cards (approximately 8% of total job cards) were deleted. An RTI reply (5 May 2017) revealed that out of all deleted job cards, only 12.6% were classified as “fake” or “duplicate” (Table 1). The

rest were deleted for other reasons, such as change of address, surrender of job card, etc. Nearly 60% were deleted due to “other” reasons. This could include (though that information is not provided in the RTI response) those who did not submit their Aadhaar numbers.¹⁵ Thus, there is as yet no credible evidence of a reduction in leakages due to Aadhaar in MGNREGA.

Disruption: While the gains from Aadhaar-integration are dubious, it has led to several new problems in the implementation of MGNREGA. Demand for work can only be registered through the MIS, and the MIS requires the Aadhaar number of an applicant to proceed. Further, for payments to be processed, correct Aadhaar-seeding in the MIS and at banks is required. This has led to hardship, especially for those who are unaware of these requirements. It has been nobody’s business to inform MGNREGA workers of what is required of them. The administrative arrangements for this are inadequate (for example, the task of seeding as well as routine MGNREGA work falls on the same person), so ultimately the whole programme has suffered from a slowdown.

In some cases, the re-engineering of MGNREGA to make it Aadhaar compliant has meant that workers’ job cards are deleted (Khera 2016a). In others, wrong seeding has led to delays in payment (even non-payment) of wages. Adding to the confusion, due to multiple waves of enthusiasm over “financial inclusion” over the years, some workers have ended up with several accounts. The bank account in the MGNREGA MIS may be different from the one that is Aadhaar-seeded. For these reasons, wages are either seriously delayed, rejected or, even “lost.” The MIS shows that the worker has been paid, but when workers enquire at the bank, their account has not been credited.¹⁶

Social Security Pensions

The National Social Assistance Programme (NSAP) provides SSP for the elderly, single-women, and disabled persons. The central government contributes ₹200 per month and most states top up this pension with a state contribution. The pension payment mechanism varies from state to state. For example, in Odisha, pensions are paid in cash at the gram panchayat each month, whereas other states use money orders, post office accounts, bank accounts, etc (Drèze and Khera 2017). Corruption appears to be less of a problem in pensions (Bhattacharya et al 2015).

An administrative problem that opens the door to identity fraud is that states do not have a systems for keeping lists updated (additions due to births and marriage, deletions due to death or migration). This means that in states where payments are made through bank accounts, the pension keeps getting credited, but not withdrawn, until family members try to close the account. In such cases, the extra credits (based on the date of death in the death certificate) cannot be encashed by family members, and are supposed to be reversed.

Where pensions are given in cash, anecdotal evidence suggests that the disbursing functionary may continue the pension for a few extra months on sympathy grounds (for instance, to help the family tide over death ceremony expenses), or may siphon off the money for some months, or may honestly strike off the name to accommodate someone on the pension waitlist.

Table 1: Cards Deleted in 2016–17, by Reason for Deletion

Reason for Deletion	Number of Cards Deleted	% of All Deleted Cards
Duplicate job card	8,11,014	8.6
Fake job card	3,95,363	4
Family has been shifted	8,58,550	9.1
Incorrect job card	32,526	0.3
Non-existent in panchayat	3,75,821	3.9
Wants to surrender job card	10,44,801	11.1
Other	58,91,373	62.6
Total	94,09,448	100

Source: Compiled from response received on 5 May 2017 to RTI query filed on 15 April 2017 by Jean Drèze.

As with other schemes, numbers on identity fraud in pensions are hard to come by. The Public Evaluation of Entitlement Programmes (PEEP) survey conducted in 10 states verified pension lists covering 3,789 pensioners and found only one case of duplication (Drèze and Khera 2017).

Savings or exclusion? The government claimed that Aadhaar-integration saved ₹399 crore up to 31 December 2016 (Goi 2017c). At a given level of benefits, a reduction in government expenditure in any particular transfer scheme can be on two counts: removal of ghosts and duplicates (“efficiency”); and a fall in the number of genuine beneficiaries (“shrinkage”), for instance, if they do not link their Aadhaar numbers when required.

Across welfare schemes, the government has been treating *any* reduction in expenditure as “savings,” even when it comes from shrinkage. This is true for SSP as well. For instance, in Rajasthan, pensioners were “mistakenly” recorded as dead and this was presented as Aadhaar-enabled savings (Yadav 2016f).

In Jharkhand too, pensioners’ names have been deleted because they did not complete Aadhaar-seeding formalities or pensions stopped due to seeding errors (Sen 2017a). Studying 100 pensioners, selected from 10 randomly-selected villages from five blocks of Ranchi district in February 2017, Biswas (2017) finds that 84% of her respondents receive pensions but irregularity in payments was a big issue. The remaining 16% were not receiving it due to Aadhaar-related issues.

Hardship: Paikra (2017) documents ABBA-related exclusion, disruption and hardship in a village of Surguja district (Chhattisgarh). Apart from seven elderly whose pension had stopped due to biometric and other technical failures, all pensioners have to travel 9 km to collect their pension, the nearest point with connectivity.

Abraham et al (2017) analyse fingerprint and iris authentication data from Andhra Pradesh and Telangana for two schemes (SSP and MGNREGA) for 2015–17. Failure rates are very high among pensioners (14.4% and 17.4% for iris and fingerprints respectively in Andhra Pradesh).

Among MGNREGA workers in Telangana, the failure rates are 7% and 7.8% respectively.

Mid-day Meals¹⁷

The MDM scheme is one of India’s most successful social policies, with far-reaching benefits in terms of school attendance, child nutrition, and learning achievements, among others (Drèze and Khera 2017). The most pressing problems in the implementation of the MDM—improving menus, providing safe storage and cooking spaces, timely release of funds—cannot be resolved by Aadhaar-integration.

According to a notification issued by the Ministry of Human Resource Development, if a child has not enrolled for Aadhaar they are required to produce their enrolment slip as well as two other types of documentation (an undertaking from the parent or guardian that the child is not enrolled in any other school and another ID document out of seven options provided) in order to remain eligible for school meals (Goi 2017f).

Inflated attendance as identity fraud: The rationale for Aadhaar-integration was widely questioned (Bhatty and Sinha 2017; Drèze 2017b; Khera 2017b, 2017c). The only possible justification for using ABBA in the MDM scheme is to check “inflated attendance,” a form of “identity fraud.” If attendance inflation exists, it could be for two reasons: to make up for the shortfall in allocations to be able to provide food according to the menu or to siphon off funds. In such cases, administrators who fudge records should be punished, not children. Moreover, there are better options to prevent attendance inflation. For instance, teachers can be instructed to SMS the number of children each day, and the block office can make surprise checks to a handful of schools to verify this.

What is the evidence on inflated attendance in the MDM scheme? Monika Yadav (2017) matched the number of children that are recorded in the government database with those reporting having MDM in the IHDS in 2011–12. Government records report that out of 143 million children enrolled in school, 105 million had been served school meals. Using IHDS data, Yadav (2017) finds that between 100 million and 107 million children report enjoying school meals. This means that the number of children for whom expenditure is being claimed (roughly) matches the number of children who actually enjoy school meals.

A glimpse of future disruption: Currently, the government only wants to ensure that children enrol for Aadhaar by making it compulsory for midday meals. Even the push towards enrolment is likely to be hugely disruptive—it will likely derail not just the mid-day meal programme, but also educational activities in schools. Teachers and (over-stretched) school administration will be forced to make arrangements for Aadhaar enrolment. Once that is done, Aadhaar-seeding will waste their time (Khera 2017b).

ABBA in schools has not yet been fully operationalised. If the government proposes to move towards daily ABBA before serving meals in the future, the move will cause further damage. The technology failures discussed earlier (connectivity, authentication failures) can arise here too resulting in a waste of time as well as exclusion.

Some glimpses of what lies ahead were visible in a residential school for tribal children in Jharkhand, where ABBA had started. Out of 232 enrolled children, 190 were Aadhaar-linked. Out of these though, while the online real-time portal was showing that only 132 students were present, in fact, a headcount at the school resulted in about 230 children being counted. Thus, out of the 190 who were registered, not all were being recognised by the machine. Similar numbers came up at other residential schools in the area. In yet others, due to lack of electricity the machine was not being used, teachers complained of time wasted due to the slowness of the system, etc (Khera 2017d).

Other Aadhaar-related Claims

There are several other claims that do not stand up to scrutiny. Some of these are briefly discussed below.

LPG subsidy: The government’s boldest claims with respect to savings due to Aadhaar relate to the LPG subsidy. In 2013–14,

the government initiated a “Direct Benefit Transfer” (DBT) pilot in 300 districts, whereby the subsidy would be credited into a person’s Aadhaar-seeded bank account. Barnwal (2015) uses data from this pilot to estimate potential savings, using per unit subsidy and the reduction in LPG purchase that followed the DBT. He admits that the reduction might be due not only to lower leakages but also to “shrinkage;” that is, low UID penetration and poor access to banks which ends up “completely excluding genuine beneficiaries” (Barnwal 2015: 19). Taking his work further, George and Subramanian (2015) claim that \$2 million, that is, approximately ₹14,000 crore had been saved due to Aadhaar-integration.¹⁸

According to Clarke (2016), however, George and Subramanian (2015) misattribute savings to Aadhaar: the period under study saw three major policy initiatives in LPG and a “connection regularisation initiative” was the main reason for removal of invalid connections, not Aadhaar-seeding. Similarly, LPG savings after 2014 result from other government initiatives (including PAHAL, GiveItUp, etc) and a reduction in international oil prices (CAG 2016).

There are two further questions about the reliability of these estimates. First, cabinet secretariat minutes for November 2015 record a savings of merely ₹91 crore due to Aadhaar-integration. Two, after questions were raised by Misra (2015), Sethi (2016) and Zhong (2016), George and Subramanian (2016) themselves clarified that what they were referring to was “potential” savings rather than “actual” savings.¹⁹ In short, there is absolutely no evidence that actual Aadhaar-enabled savings in the LPG subsidy are anywhere near the initial projections, still routinely quoted by government sources.

Biometrics and uniqueness: A crucial premise of the Aadhaar project was that the use biometrics would ensure that each person was issued a unique number. This assumes that biometrics can work for such a large population, that the inherently probabilistic nature of biometric technology would not impede the programme in any way and that enrolment procedures would not be violated ensuring the sanctity of the database. There is no systematic data on this, but there is enough to raise questions about this. In 2012, when 2.29 crore Aadhaar numbers had been generated, 3.84 lakh had to be cancelled as they were “fake” (Chauhan 2012; GOI 2013). This appears to have been because of violation of due process during the enrolment.

Elimination of ‘middlemen’: Among the early stated aims of the UID project was also to eliminate “middlemen” or intermediaries who were seen as the main source of corruption. For instance, this referred to ration dealers in the case of the PDS, or the postman who delivered money orders to pensioners. As noted earlier, the corruption of the intermediary in these schemes is being dealt with by other means (for instance, through bringing greater accountability in the system).

Meanwhile, the Aadhaar project has spawned its own new army of intermediaries, some of whom are also corrupt. This includes enrolment agents, seeding agents, persons managing

kiosks (such as E-Mitra in Rajasthan, Pragya Kendras in Jharkhand), data-entry operators in government offices and so on.

Role of Propaganda

The earlier sections demonstrate how the government’s “calculations” of savings due to Aadhaar are more fiction than fact. Quite likely, a large part of what is passed off as savings is, in fact, exclusion.

Despite mounting evidence to the contrary, the impression that Aadhaar is helping the poor persists. The solution to this puzzle lies in the fact that the Aadhaar project has relied—very heavily—on propaganda. From the very beginning, perception management through advertisements, branding, etc, has been a part of the project’s strategy (GOI 2010a, 2010b). This short section documents some of the strategies used to manage perceptions.

Favourable media stories: Convenient favourable stories at crucial junctures is an oft-used strategy. Close on the heels of important government announcements on Aadhaar-linking (for example, on MDMS), stories of “fake” enrolments discovered due to Aadhaar appear to create the impression that the decision was justified (Das Gupta and Pandey 2017; Kumar 2017). Similarly, Chatterji (2017) reported deletion of nearly 1 crore “fake” job cards. Follow-up investigations reveal that there is little substance in these stories (Drèze 2017b on MDM and Table 1 for MGNREGA).

During the hearings on mandatory linking of Aadhaar with Permanent Account Number (PAN) cards in the Supreme Court, reports on Aadhaar “data leaks” were emerging by the dozens. Suddenly, there was a “feel good” heart-warming story of Aadhaar helping pensioners in Rajasthan (Singh 2017).

Manipulative headlines: The reports on the discovery of “fake” job cards and children show that actual events may not match the facts on the ground. At other times, even when the actual news is in sync with the news report, the headline can be used to create a different impression. For instance, Parliament questions clearly state that ration cards were deleted on account of being ineligible/bogus. Yet government press releases based on these answers drop “ineligible” and only use “bogus” (see for instance, *Financial Express* 2016; Chatterji 2017; Parashar 2017). This creates the impression that Aadhaar has helped weed out “ghost” or “fake” cards and has led to big savings. Another commonly used trick is to put the cumulative figure for several years in the headline (Das 2016, 2017).

Following widespread criticism of the move to make Aadhaar mandatory for MDM, the government resorted to packaging the move as “voluntary.” A news report headlined “Govt Relaxes Aadhaar Norm, Makes Other IDs Acceptable for Subsidy Schemes” suggested that the government had relaxed the mandatory condition, even though there was no relaxation.

Labelling: “Labelling” is another way to shape perceptions. In the early years, those who questioned the Aadhaar project were labelled as “anti-technology” or Luddites (Joseph 2017). In a case of the pot calling the kettle black, those who raise difficult

questions have been called “vested interests” by the very people who need to reflect on their own conflict of interest. In desperation, the head of ISPI (an association of private entities building businesses using Aadhaar) resorted to setting up anonymous twitter handles to troll critics, even calling them “isi agents.”

Media diplomacy: The media strategy to create Aadhaar’s brand image includes “damage control.” After the *Hindustan Times* published a critical opinion in 2010, the editor received a phone call from the chairperson of the UIDAI expressing reservations about its publication. Sometimes, newspapers “make amends” by publishing gushing editorials soon after (Drèze 2010).

The *Wall Street Journal* questioned estimates on LPG savings (21 March 2016). This forced a response: on 2 April, a clarification appeared in the *Indian Express* (George and Subramanian 2016). On 6 April, an episode of “Walk the Talk” with Nandan Nilekani (former UIDAI chief) appeared. The interview completely ignores the “retraction” on savings estimates, as if there was no controversy around them, and provides a platform to repeat the discredited figures. The interview itself looked suspiciously like an attempt to whitewash any damage from the retraction.

Sponsored studies: Another element that has fuelled the propaganda is “sponsored studies” (Drèze 2016a). The chief executive officer (UIDAI) cited a potential savings of \$11 billion due to Aadhaar on the basis of a World Bank report (Pandey 2017). This so-called estimate was called out in 2016. The World Bank report in question “mistakes” the Indian government’s total budget (\$11 billion) on cash transfer programmes, as “savings” (Khera 2016b).²⁰

Several such reports are likely in the pipeline. Philanthropists such as Omidyar Network, with known business interests in fintech, are funding large research projects on Aadhaar (Sologkiy 2016). Fintech will likely receive a big boost due to Aadhaar (Ranade 2017). A “State of Aadhaar” report prepared by IDInsight provides a glimpse into what might be in the pipeline (Abraham et al 2017). Discussing data accuracy, it uses data from 2012, ignoring a recently reported figure (in Parliament) that 49,000 enrolment agencies were blacklisted for fraudulent practices (Abraham et al 2017: 18–19).

The Aadhaar project started in an evidential vacuum. Over time, their initial assumptions are getting invalidated. Confronted with this embarrassing situation, the response has been to set in motion an elaborate propaganda machinery to

fabricate a different reality. Given the concerted “media strategy” of the UIDAI since its inception, the favourable impression in people’s minds is hard to dislodge, in spite of the growing evidence of exclusion, denial and hardship.

Concluding Remarks

The Aadhaar project began without much understanding of the problem that it was expected to solve. In spite of the early warnings about the possible damage it might cause, the project has been scaled up and in the official narrative, it is a great success (“shallow draughts intoxicate the brain”). This paper is an attempt to “drink deep” and sober us again.

Available evidence does not substantiate any significant gains from Aadhaar-integration in welfare programmes. On the contrary, it has inflicted considerable pain. Apart from (supposedly) one-time costs of enrolment and Aadhaar-seeding, people are now faced with higher transaction costs on a monthly basis (in pensions and the PDS for instance), and in a significant minority of cases, also face exclusion and denial. Even when it works, people suffer from considerable indignities.

Aadhaar-integration has also facilitated over-centralisation of administrative controls. If a person does not get authenticated, there is no easy or accessible redress available. Even with the best of intentions, POS machine operators may not be able to ascertain the meaning of a particular error message (there are over 50 error codes!) and guide affected persons on what to do. An error in the system (wrongly entered entitlements for instance) can only be corrected at far-off servers. In this and other ways, Aadhaar-integration has reduced transparency and accountability in the system and added to a sense of disempowerment.

Another damage is the “displacement” effect. Privileging Aadhaar over all other technologies, which have a proven record of improving administration, displaces efforts to scale up those technologies. For instance, in Bihar, the uploading of NFSA ration card lists (very important to enhance transparency and reduce the arbitrary power of PDS dealers) was delayed. Under pressure from the central government, the short-staffed food department had to focus on Aadhaar seeding rather than uploading NFSA lists. Abandoning experiments with smart cards, in lieu of ABBA, for last-mile authentication is another example.

The use of Aadhaar is an admission of “governance” failure. The government has failed to hold to account the minority who indulged in corrupt practices. Instead, by deploying untested and fragile technology, the victims of corruption are paying the price.

NOTES

1 This section follows up on Khera (2015) with updates.

2 See *Indian Express* (2014), for instance. Low rates of birth registration would be mentioned in passing, but according to the Civil Registration System data (GoI 2017e), in 2009 just over 80% of births of children under five years were registered. According to National Family Health Survey data the corresponding figure for 2015–16 is 80% (GoI 2017d).

3 The full list includes the documents that can be produced for children (GoI no date).

4 On 19 March 2015, in Rajya Sabha it was stated that “more than 9 crore enrolment packets

have been rejected so far, that did not meet the quality and de-duplication criteria,” due to suspected fraud, duplication, etc (GoI 2015).

5 The issue of caps, and a move towards relaxation, has been discussed in Drèze and Khera (2017).

6 This section builds on the discussion in Khera (2011).

7 This is not always the case, for example, labourers may not always be given their passbooks, overburdened banks may rely on “middlemen” (such as sarpanches or panchayat secretaries) to facilitate bulk withdrawals on behalf of workers, etc. These loopholes are discussed later.

8 The reduction in leakages in these states before the NFSA was largely driven by PDS

reforms (see the literature cited in Drèze and Khera 2017).

9 According to Government of India (2017a), 73% Aadhaar seeding had been achieved in the PDS, but there are some questions about this as well (*Hindu BusinessLine* 2016).

10 An earlier news report (after a government review in May 2016) claimed savings of ₹10,000 crore in the PDS from deletion of 1.6 crore bogus cards (*Indian Express* 2016).

11 Leftover rations refer to that part of the stock that remains unsold at the end of the month because cardholders did not claim it. In many states, there is a “carryover” facility, that is, beneficiaries could claim missed rations in

subsequent months, so quite likely the share of leftovers was quite small.

12 However, the Jharkhand experience suggests that because of the way in which it was rolled out, it is the ration card beneficiaries who are paying the price, not the dealers.

13 This, however, contradicts field reports and subsequently, a Government of Rajasthan circular dated 24 March, withdrew the OTP facility (Thomas 2017).

14 Aadhaar-integration was supposed to bring greater transparency and provide real time access to data, but this promise has not been fulfilled in any meaningful manner (more on this below).

15 There was tremendous pressure to achieve 100% Aadhaar-seeding in the MGNREGA MIS. In order to meet these targets, anecdotal evidence suggests that field-level functionaries simply deleted job cards of those who failed to give Aadhaar numbers (Khera 2016a; Aggarwal 2016).

16 On these issues in the payment system, see Aggarwal (2016, 2017), Dhorajiwala and Narayanan (2016), Dhorajiwala et al (2017); Sabhikhi (2017); Sen (2017b).

17 This section builds on Khera (2017b) and Khera (2017c).

18 This figure is also in Government of India (2017c).

19 Alternate estimates are more conservative: only 3% reduction, compared with the government's claim of 24% (Clarke 2016; Lahoti 2016; and Venkatanarayanan 2017). Interestingly, when government estimates were challenged in the Supreme Court (in Shantha Sinha petition), the government chose to ignore these questions.

20 The World Bank relies on Banerjee (2015) for the "savings estimate," but she only reports the total budget of India's cash transfer programmes (NREGA, pensions, etc): "The value of these transfers is estimated to be ₹70,000 crores (\$11.3 billion) per annum."

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